



EFFECTIVENESS OF TEACHING THROUGH ANIMATION ON ACHIEVEMENT OF STUDENTS IN ENGLISH SUBJECT OF STANDARD- VI

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ABSTRACT

In this study, the researcher has tried to check the effectiveness of Animation modules designed for English language text book of standard six. The objectives were, to develop animation modules of the selected content from English textbook of standard- VI, to study the level of achievement of experimental group and control group of English subject of standard –VI, during the experiment and replication of the experiment and to observe the practical significance of the statistical result of the study. The sample contained 169 students, 86 for implementation of the experiment and 83 for the replication of the experiment from two randomly selected schools of Navsari district of Gujarat. Experimental Control Randomized Two Group Post-Test Only Design was applied and DATA was collected after implementing and replicating the experiment. After collection of the data, the statistical technique of mean scores, Standard Deviation and t-test was applied. The null hypotheses were verified particularly by comparing the scores of post-test of control group and posttest of experimental groups. After this, the practical significance of the effect of treatment was also measured with the help of Effect size. Significant difference was observed in favour of the experimental group in both experiment and replication of the experiment. It was inferred from the interpretation of the DATA that the animation modules enhance the achievement of students in English language.

KEY WORDS: Animation, Achievement, Experimental Method, ELT.

INTRODUCTION:

Looking at the condition of the students of Gujarati Medium Primary schools of Gujarat, the researcher tried to study the reasons behind it and found that the primary schools do not have teachers who had English subject as a principle subject at their graduation and that they are supposed to teach all the subjects irrespective of the subject that they had opted in under or post graduation. Change may be brought about by introducing Animation as a tool to teach which may arise interest among the students and can help the teacher too. Considering this, the researcher has made up her mind to create animation modules for the initial units of Semester 1 text book of English of standard six of Gujarati medium schools of Gujarat. By reviewing various literature, the researcher found out the research gap and focused on it. Many studies have been made about animations, but for Gujarati Medium Schools of sixth standard, this might be the first ever attempt.

OBJECTIVES:

1. To develop animation sequences of the selected content from English textbook of standard- VI
2. To study the level of achievement of experimental group and control group of English subject of standard –VI
3. To study the level of achievement of experimental group and control group of English subject of standard –VI during the replication of the experiment
4. To observe the practical significance of the statistical result of the study

HYPOTHESIS:

H₀₁: There will be no significant difference between mean scores of post-test of experimental group and post-test of control group

H₀₂: There will be no significant difference between mean scores of post-test of experimental group and post-test of control group in the replication.

Population and Sample:

The population of this research is the students of the sixth standard of Gujarati medium primary schools of Navsari District, Gujarat. So the finding of this study may be applicable to the students of the sixth standard of Gujarati Medium Schools of Navsari district.

The randomly selected sample contained 169 students in which 86 students were taken in the implementation of the experiment and 83 students were taken in the replication of the experiment. The two Gujarati Medium Primary schools in the Navsari district were 1. L.M.P. Reva Experimental Primary School, Bilimora, Dist., Navsari and 2. A. B. School, Khund, Chikhli, Dist. Navsari.

Research Design:

In the present study, from true experimental design, Randomized post-test design also known as Experimental Control Randomized Two Group Post-Test Only Design, has been selected.

As per the research design there are two stages of experimentation. The

researcher has first made an experiment in an urban school and then a school of rural area was taken for the replication of the experiment. There were two groups, one is experimental group (ER) and other is control group (CR) in. In Experimental group (ER) treatment is applied while in control group (CR) treatment is not applied and English subject was taught through the traditional method being practiced by the researcher in the school.

Development of Animation Modules:

The researcher designed Animation Modules with the help of technical experts having professional experience for the selected units of the English text book of standard six. It was a huge task and the researcher followed several steps.

Right from the selection of the content to the finalization of the modules, all steps are summarized here.

- *Selection of the Content:* Determined after consultation of the school administration and consideration of school convenience.
- *Content Analysis:* Content analysis was made considering the learning outcomes prescribed by GCERT.
- *Review of Animation based Available Sources:* The researcher made a simple survey to check available academic resources regarding Animations.
- *Design of Animation Modules:* Animation modules were prepared with the support of academic and technical experts.
- *Expert Review and Responses:* The modules were shown to subject experts (Academic Experts) as well as technical experts. Required modifications were made.
- *Pilot study:* The pilot study was made on J.J. Maheta School, located in Bilimora. Care was taken to implement the experiment exactly in the same manner in which the real experiment was supposed to be conducted.
- *Finalization of the Animation Modules:* Final draft was designed after exposure to actual situation and more modifications considering them.

Teacher made Achievement Test:

Teacher made achievement test for units selected by the researcher from the textbook of English of standard six was designed. This test is used as post-test, a tool for collection of the DATA.

DATA Collection:

The data were collected with the help of posttest. The teacher made post test contained 62 test items to be asked as per the expected learning outcomes. Answers were recorded on answer sheet. The test was that of 50 marks. The investigator created a data spreadsheet in MS Excel 2007 an office package of Microsoft.

DATA Analysis and Interpretation:

After collection of the data, the statistical technique of mean scores, Standard

Deviation and t-test was applied. The null hypotheses were verified particularly by comparing the scores of post-test of control group and post-test of experimental groups. As mentioned above, the investigator created a data spreadsheet in MS Excel 2007 an office package of Microsoft. For the analysis of the data, the investigator has taken help of expert in statistical data analysis who has used SPSS computer programme to compute mean scores, standard deviation and t-ratio. In addition to this, the practical significance of the experiment and replication of the experiment was also measured through the formula of effect size. Then the average effect size of experiment and the replication of the experiment were calculated to infer the practical significance as a whole.

Post-test of Control and Experimental Groups of the implementation of the Experiment:

H₀₁: There will be no significant difference between mean scores of post-test of experimental group and post-test of control group.

Table 1: Group wise Mean Scores, Standard Deviation and t-ratio of the post-test

Group	Total (N)	Mean	SD	SED	t-ratio
Experiment Group	45	38.133	4.0033	0.9043	12.959**
Control Group	41	26.415	4.3504		

**Significant at 0.01 level (12.96 > table value 2.58)

From above table it can be observed that the obtained value of t-ratio between experiment and control group students is 12.96. When df=84, the obtained value of t-ratio does exceed the table value of 't' 2.58 needed at 0.01 level of significance. Hence there is significant difference between the mean scores of experiment and control group students. Consequently, the null hypothesis (H₀₁) that there will be no significant difference between mean scores of post-test of experimental group and post-test of control group after the experiment of the study is not accepted at 0.01 level.

It means that the difference between the mean scores of control group and experimental group of the experiment was significant and it was in favour of the experimental group. So it can be inferred that the treatment of Teaching with the help of Animation Modules applied to the experimental group during the experiment has been more effective in terms of achievement is the English Subject for the students of standard six and is an effective tool.

Post-test of Control and Experimental Groups of the Replication of the Experiment:

H₀₂: There will be no significant difference between mean scores of post-test of experimental group and post-test of control group in the replication of the experiment.

Table 2: Group wise Mean Scores, Standard Deviation and t-ratio of the post-test

Group	Total (N)	Mean	SD	SED	t-ratio
Experiment Group	43	37.93	4.8436	1.0951	8.611**
Control Group	40	28.5	5.1137		

**Significant at 0.01 level (8.61 > table value 2.58)

From above Table, it can be observed that the obtained value of t-ratio between experiment and control group students is 8.61. When df=81, the obtained value of t-ratio does exceed the table value of 't' 2.58 needed at 0.01 level of significance. Hence there is significant difference between the mean scores of replication of the experiment and control group students. Consequently, the null hypothesis (H₀₂) that there will be no significant difference between mean scores of post-test of experimental group and post-test of control group after the replication is not accepted at 0.01 level.

It means that the difference between the mean scores of control group and experimental group of the experiment was significant and it was in favour of the experimental group. So it can be inferred that the treatment of Teaching with the help of Animation Modules applied to the experimental group during the replication of the experiment has been more effective in terms of achievement is the English Subject for the students of standard six and is an effective tool.

- The effect size value of statistical results during the experiment is 2.69 and the effect size value of statistical results during the replication of the experiment is 1.84. The average effect size value is 2.26, which is greater than 1.00. The practical significance of results is considered higher if the effect size value is ≥ 0.1 . (Haladyna, Tom, Thomas, 1979). Thus the effect size in the present study indicates that the practical significance of the result was high.

FINDINGS:

From the analysis of the DATA obtained after the experiment as well as the replication of the experiment, it can be said that teaching with the help of Animation is more effective in terms of achievement in English subject compared to the tradi-

tional way of teaching so far, and it enhances the achievement of the learners of English subject of standard six of the Gujarati Medium schools of Navsari district.

IMPLICATIONS OF THE STUDY:

The research revealed following educational implications. From this research it is implied that students tend to remember what they have learnt through such an interesting aid like animation and retention of the students appears to be increased. The Animations create interest among the students and it results in interest in the subject that they are learning. Anything learnt with interest is obviously remembered for a long time. Being so interesting, they create readiness to learn which helps the students learn better as per the law of readiness. Students are fond of animations as parents are always found to be complaining about their child that s/he keeps on watching television and most of the times cartoon channels. Teaching through animation fulfils their interest in cartoons and that helps them learn better.

REFERENCES:

A: Books:

- Best J. W. (1993) Research in Education (6th ed.). New Delhi: Prentice Hall of India Pvt.Ltd.
- Desai, K.G. Shah & Desai H.G. (2013). Sanshodhan Paddhathi ane Praviddhi. Ahmedabad: University Granthnirman Board.
- Gall, M. D., Borg, W. R., & Gall, J. P. (1996). Educational research: An introduction. Longman Publishing.
- GCERT (2012). Text Book of English of Standard Six (1st ed.). Gandhinagar: Gujarat School Text-Book Board.
- Kothari, C.R., (1994). Research Methodology. New Delhi: Wiley Eastern Ltd. New Age International Ltd.
- Patel, R.S. (2017). Fundamental Concepts of Research: Research Handbook. Ahmedabad: Jay Publication.
- Uchat, D. A. (2009). Research Methodology in Education and Social Sciences. Rajkot: Shant Publication.

B. Web References:

- Desai, Amjad (2015). Animation in Education. Retrieved from <http://www.cgpondit.com/animation-in-education/> retrieved on 5th July 2015
- <http://arjournals.annualreviews.org/>
- <http://unicef.in/Story/1145/-Meena-animated-spots-on-girls-education-go-on-Air>
- http://www.ncert.nic.in/departments/nie/del/publication/pdf/english_primary_level.-pdf
- http://www.ncert.nic.in/new_ncert/ncert/rightside/links/pdf/focus_group/english.pdf
- <https://www.britannica.com/art/animation>
- MEENA Cartoon Health Awareness: retrieved from https://www.youtube.com/watch?v=QUM_goY3E-g